Evaluating the effectiveness of brief behaviour change counselling in a primary care facility

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Declaration

I, the undersigned, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree. I also declare that ethical approval for this study was obtained from the Health Research Ethics Committee of Stellenbosch University (reference number: S17/09/166).

Signature: JH Ganzevoort` Date: 25/05/2020

Abstract

Introduction
Non-communicable diseases are associated with four risky behaviours, an unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. A new model of brief behaviour change counselling (BBCC) was developed in South Africa for primary care providers. There is South African evidence that BBCC can be effective with harmful use of alcohol and tobacco, but no local evidence with regard to unhealthy diet and physical inactivity.

Aim
The aim of the study was to evaluate the effect of BBCC on diet and physical activity in patients with overweight/obesity and a moderate to high cardiovascular disease (CVD) risk. The primary outcome of the study was for at least 15% of patients to achieve either a 20% improvement in dietary score or a 20% improvement in the metabolic equivalent of task (MET) minutes score

Setting
A primary care clinic within the Cape Winelands district in the Western Cape, South Africa

Methods
This was a before-and-after quantitative study that measured change in diet, physical activity and body mass index (BMI) associated with BBCC delivered by primary care providers to 145 patients. Participants completed physical activity and diet questionnaires as well as measures of blood pressure, weight and BMI at baseline and 4-8 months later. Two sessions of BBCC were given over a period of 2-4 months. Data was analysed with the Statistical Package for the Social Sciences.

Results
Paired data was obtained from 139 patients, mean age was 53.5 years (SD ±10.0), and 75.9% were female with a mean BMI of 36.6 kg/m^2 (SD ±8.0). Overall 78.5% of patients achieved the primary outcome, 77.0% improved their diet score by $\geq$20% and 8.9% improved their MET minutes score by $\geq$20%. The mean diet score and mean MET minutes score also significantly improved ($p<0.001$). There were no significant changes in BMI, weight or blood pressure

Conclusion
This study shows the potential of BBCC in the primary care setting and adds to the evidence for the effectiveness of BBCC across all four key risk behaviours for non-communicable diseases. Training of primary care providers in BBCC should continue and further clinical trials to assess the effect of this model of BBCC in our context are needed.

Introduction

Non-communicable diseases (NCDs) are associated with four risky behaviours, an unhealthy diet, physical inactivity, tobacco use and the harmful use of alcohol. These behaviours lead to overweight and obesity, high levels of blood glucose and cholesterol, and raised blood pressure, which are the main risk factors for cardiovascular diseases.[1,2] It has been projected that NCD mortality will increase from 28 million deaths in 1990 to 50 million in 2020 worldwide.[3,4] In South Africa NCDs account for 33-39% of premature mortality across health districts.[5] WHO estimates of the burden of disease in South Africa suggest that NCDs caused 28% of the total burden of disease, measured by disability-adjusted life years (DALYs), in 2004.[4] According to WHO statistics, cardiovascular deaths account for 34% of all deaths worldwide. CVD is the largest cause of death in all the developing regions with the exception of Sub Saharan Africa, where it is the leading cause of death in those over the age of 45 years.[6]

In South Africa, the largest contributing risk factor, in terms of attributable DALYs, that has the greatest impact on NCDs, is a high body mass index (BMI).[7] Obese and overweight patients have significantly higher rates of hypertension and diabetes, associated with higher cardiovascular risk.[8] The higher the BMI in an individual the greater the prevalence of hypertension and diabetes.[9] Obesity is associated with poorer hypertension and diabetic control.[9] Studies have proven weight loss constitutes a feasible, effective and safe non-pharmacological therapy in hypertension and diabetes.[10] In South Africa mean BMI values for men and women were 23.6 kg/m^2 and 29.2 kg/m^2, respectively.[11,12] For men, 31% were overweight or obese (≥25 kg/m^2) and 9% had abdominal obesity, whereas 68% of women were overweight or obese and 42% had abdominal obesity[12] which directly contributes to a higher risk of cardiovascular disease.

Patient's individual knowledge about hypertension, diabetes and benefits of lifestyle modification seems to be key to successful control of NCDs.[13] Health care workers can play a vital role in encouraging and supporting patients with underlying risk factors and risky behaviours to make and maintain healthier lifestyle choices. Risky behaviour for obesity and overweight include physical inactivity, sedentary behaviour and poor diet.[4,14] Only 28% of people in South Africa have a high level of physical activity, 13% moderate physical activity, while 59% have a low level of physical activity.[15] One of the interventions to reduce weight, is to increase physical activity.[15,16] Exercise alone has a modest effect on weight loss[17], but has a significant effect on blood pressure control.[18] Increased physical activity and dietary modification, however, can have a significant effect on weight loss.[16,19] High intake of energy from highly processed, energy-dense, micronutrient-poor, oily and salty take-away convenience foods and beverages, are major contributors to overweight and obesity in South Africa.[20] There is considerable published data to strongly support

the benefits of physical activity and dietary changes as a means to decrease the morbidity and mortality of CVD and stroke in adults.[21,22,23,24]
In South Africa the Department of Health has identified the need to strengthen the capacity of health service staff to provide brief counselling on the main lifestyle risk factors for NCDs.[25,26] The national primary care guidelines recommends giving advice to the client with high cardiovascular risk on lifestyle modification.[27] However, research in the Western Cape, has shown that training of primary care providers in how to offer such advice is inadequate and the capacity of providers to educate and counsel patients on lifestyle modification is generally poor.[28]

There are several effective counselling strategies developed for use in primary care settings.[29] Motivational interviewing (MI) has the strongest evidence base in primary care for decreasing weight, blood pressure and reducing harmful alcohol use. MI is distinct from the traditional, prescriptive, advice-giving approach to patient education. Counselling in the spirit of MI has been described as collaborative, evocative, empathic and honouring of patient autonomy.[44] MI provides an alternative approach to the usual more authoritarian approaches and outperforms traditional advice-giving in 80% of studies.[31,46] However, motivational interviewing can require significant time with multiple sessions and a high level of competency from the counsellor to be successful. More structured approaches have used the trans-theoretical stages of change model (pre-contemplation, contemplation, preparation, action and maintenance) as a guide to aligning counselling with the patient's stage of change. This has shown some benefit in weight management. The FRAMES (feedback about personal risk, responsibility of patient, advice to change, menu of options, empathy, self-efficacy enhancement) model is brief and more structured, with some evidence for effectiveness in substance abuse. Another highly structured model is the 5As (ask, advise, assess, assist, arrange) which also has some evidence for its effectiveness with smoking, alcohol and modest weight loss.[29]

A new model of brief behaviour change counselling (BBCC) was recently developed in the Western Cape that combined the structure of the 5As with a guiding style derived from motivational interviewing.[30] A training programme was also developed[31] and evaluation demonstrated that nurses and doctors adopted the new model of BBCC in their clinical practice.[32] This model of BBCC has also been shown to be effective in helping pregnant mothers to reduce and stop smoking when delivered in the antenatal care clinic at a hospital.[33,34] A local workplace based health promotion programme also associated this model of BBCC with a reduction in harmful alcohol use. More evidence of the effectiveness of this model on other behaviours in the primary care context, such as physical activity and diet, is needed.

The aim of this study was to evaluate the effectiveness of BBCC to change physical inactivity and/or unhealthy diet in patients with overweight and obesity, who were at risk of cardiovascular disease, at Kylemore primary care clinic, Cape Winelands, South Africa.

Methods

Study design

This was a before-and-after quantitative study that measured change in diet, physical activity and BMI associated with BBCC delivered by primary care providers. As this was an unfunded MMed student research project it was not feasible to conduct a full experimental study such as a randomised controlled trial. It was hoped that this study would add to the evidence base for this model of BBCC in our context and might support the future funding of a larger scale experimental research project.

The primary outcome of the study was for at least 15% of patients to achieve either a 20% improvement in dietary score or a 20% improvement in the metabolic equivalent of task (MET) minutes score.[35] Secondary outcomes included:

- Significant improvement in mean dietary score
- Significant improvement in mean MET minutes
- Significant decrease in mean weight
- Significant decrease in mean BMI
- Significant decrease in mean systolic and diastolic blood pressure

Setting

Kylemore primary care clinic serves a predominantly 'coloured' community within the Cape Winelands district (CWD) in the Western Cape, South Africa. Clinic records suggest that 51% of patient visits are for NCDs and it is estimated that 26% of adults in the local community have a NCD. The community is a low- to middle- income population that speaks predominantly Afrikaans and English. The clinic covers a population of about 10000 people. The clinic is open every working day during office hours and manages approximately 1500 patients per month. Services include adult and child curative care, chronic disease management, maternal, child and reproductive health care. The staff at the clinic include three clinical nurse practitioners, one professional nurse, one staff nurse and one assistant nurse. There is also a pharmacist, two administrative clerks and two cleaners. A doctor visits the clinic twice a week and a NGO appointed 2 lay counsellors.

Study population, sample size and sampling

The study included adult patients (>18 years) with a greater than 10% risk of having a heart attack or stroke over the next 10-years, as calculated by the locally validated cardiovascular disease risk assessment tool in the primary care clinical guideline.[1] Patients were also required to have a BMI of more than 25kg/m^2 and to continue attending the clinic for the next 6-months. Patients with co-morbidities of cancer, hypothyroidism, chronic obstructive pulmonary disease or a recent admission to hospital were excluded as well as pregnant women.

The study required a sample size of 141 patients to achieve a power of 80% and a two-sided significance of 5% for detecting a difference of 10% between the paired groups before and after the intervention. This sample size was calculated by the Biostatistics Unit at Stellenbosch University via the Statulator statistical programme. Assuming a 10% loss to follow up rate, the final intended sample size was 150 patients.

The staff nurse, who prepared all patients for their consultation, identified the first three consecutive patients each day that met the inclusion criteria and invited them to participate.

Intervention

The nurse practitioner provided BBCC for 5-10 minutes during the consultation and if she was too busy to do this then a lay counsellor provided BBCC, immediately before or after the consultation.

BBCC involved the sequential completion of five steps as shown in Table 1.[30] For each step a number of key tasks were identified, which were completed in a guiding style. The guiding style emphasized a collaborative approach, understanding the patient's situation and perspective through empathic listening, evoking change or commitment talk from the patient (talk that suggests a desire, ability, reason, need or commitment to change behaviour), and respecting the patient's choice and control.

Four primary care providers received training in BBCC from the Division of Family Medicine and Primary Care at Stellenbosch University over a period of 2 days (8-10 hours). Two of the providers were clinical nurse practitioners and two were lay counsellors working in the clinic from a local non-government organisation (NGO). The trained counsellors (nurses and lay counsellors) used an observation tool to prompt them during BBCC and to self-monitor their fidelity to the intervention. The researcher observed the counsellors for 2-3 counselling sessions and had informal discussions with the counsellors to check their fidelity and review their self-assessments according to the 5A's tool (Table 1).

A follow-up consultation was arranged with each patient, 2-4 months later, in order to provide a second BBCC session. Then a final follow-up was arranged after another 2-4 months to collect the final data.

Table 1. The 5A's tool in BBCC

STEP	CRITERIA
ASK	Asks if the risk behaviour is present (i.e. Do you smoke)
	Asks about the risk behaviour (i.e. How much do you smoke)
	Asks what the patient already knows / wants to know about the risk behaviour.
	Asks permission to provide further information.
ALERT	Provides information related to what the patient already knows / wants to know about the risk behaviour.
	Provides additional information in a neutral way.
	Asks for the patient's response to the information provided.
ASSESS	Assesses importance of change for the patient.
	Assesses the patient's confidence to change.
	Confirms the patient's state of readiness.
	Respects their choice.
ASSIST Complete according to readiness to change	Asks about or acknowledges the patient's concerns or challenges regarding change.
	Asks the patient to think of realistic ways to overcome these concerns or challenges
	Offers relevant, practical assistance e.g. supportive material, prescription
	Helps the patient identify social support for change.
	Clarifies the specific goal for change.
	Agrees on what action the patient will take.
ARRANGE Complete according to readiness to change	Emphasise that help is available when ready / Emphasise your on-going commitment to support change.
	Refer for expert or additional help if appropriate.
	Arrange a follow-up contact to provide ongoing support and review progress.

Data collection

A self-administered questionnaire, in either English or Afrikaans, was completed by the patient at baseline and 2-4 months after the second BBCC session, which would be 4-8 months from baseline. If the patient could not complete the questionnaire on his/her own, a staff nurse or research assistant, who was not involved with the counselling, assisted the participant.

The questionnaire consisted of the International Physical Activity Questionnaire (IPAQ)[36] (Appendix 1) and a nutrition questionnaire (Appendix 2).[37] The IPAQ is a validated and reliable questionnaire that can be used in many settings and in different languages.[36] The dietary questionnaire was developed by the Heart and Stroke foundation of South Africa and was already part of the training material for BBCC and patient education material on nutrition.[37] Patient education material, such as a recipe book,[37] was offered to the patient and given to them if the patient confirmed that they would like it.

Information was also extracted, by the staff nurse or research assistant, from the medical record:

- Age, sex, diagnoses, medication and height (at baseline)
- Weight and blood pressure (at baseline and 4-8 months). The staff nurse was trained to perform the blood pressure according to a standardised operating procedure[38] using the PC-900Pro electronic automatic vital signs monitor.

Data analysis

Data was captured in Excel and checked for errors or omissions. Data was then analysed using the Statistical Package for the Social Sciences Version 24.1

MET (metabolic equivalent of task) minutes were calculated from the IPAQ data. The MET is a physiological measure that expresses the energy cost (or calories) of physical activities. One MET is the energy equivalent expended by an individual while seated at rest. MET minutes is a product of the intensity of physical activity and the duration. The dietary questionnaire consisted of 20 yes/no questions and the number of positive answers gave a score out of 20.

Descriptive analysis was used to calculate the mean and standard deviation (normally distributed) or median and interquartile range (not normally distributed) of numerical data. Categorical data was analysed as frequencies and percentages. Paired T-tests were used to compare the mean difference for normally distributed numerical data (e.g. weight, BMI, blood pressure and dietary score) from baseline to follow up. The Related-Samples Wilcoxon Signed Rank Test was used to compare the MET before and after score as this was not normally distributed numerical data.

Ethical consideration

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of Stellenbosch University (S17/09/166) and permission was obtained from the Department of Health, Western Cape to conduct the study at Kylemore clinic.

Results

Overall, 151 participants were recruited for the study. Five patients were excluded as BMI was actually <25kg/m^2 and one due to hyperthyroidism, leaving 145 patients at

baseline. Six patients were lost to follow up and therefore paired data was obtained for 139 participants.

Profile of participants at baseline

Participants in this study were mostly obese older women on treatment for hypertension (Table 1). The most frequently prescribed medications were hydrochlorothiazide and simvastatin, followed by enalapril and amlodipine.

Table 1: Profile of participants at baseline (N=145)

Variable	**n (%)**
Co-morbidity	
Hypertension	95 (65.5%)
Diabetes	6 (4.1%)
Both hypertension and diabetes	44 (30.3%)
Sex	
Male	35 (24.1%)
Female	110 (75.9%)
Medication	
Hydrochlorothiazide	112 (77.2%)
Simvastatin	109 (75.2%)
Enalapril	93 (64.1%)
Amlodipine	88 (60.7%)
Metformin	52 (35.9%)
Aspirin	45 (31.0%)
Atenolol	34 (23.4%)
Glimipiride	28 (19.3%)
Lorsartan	13 (9.0%)
Protophane	5 (3.4%)
Actraphane	5 (3.4%)
Spironolactone	5 (3.4%)
Furosemide	1 (0.7%)
Overweight and obesity	
BMI 25 – 29.9 kg/m^2	29 (20.0%)
BMI >= 30 kg/m^2	116 (80.0%)
	Mean (SD)
Age (years)	53.5 (SD ±10.1)
BMI (kg/m^2)	36.6 (SD ±8.0)
Systolic blood pressure (mmHg)	141.6 (SD ±17.1)
Diastolic blood pressure (mmHg)	81.1 (SD ±11.9)
Diet score	11.7 (SD ±3.7)
MET minutes score/week	5000.1 (SD ±3078.7)

Primary outcome

The study achieved its primary outcome as (106/135) 78.5% of participants showed at least a 20% improvement in either dietary or MET score. Looking at the individual components, (107/139) 77.0% of patients improved their diet score by 20% or more, while only (12/135) 8.9% of patients showed a 20% improvement in MET score.

Secondary outcomes

Table 2 presents the secondary outcomes. There was a significant improvement in both the diet score and the METS from before to after the intervention. However, there was no significant corresponding change in BMI, weight or blood pressure.

Table 2: Results for secondary outcomes before and after BBCC (N=139)

Variables	**Median (IQR)**	**Median (IQR)**	**Test statistic (Z)**	**p value**
MET minutes score	4950.0 (2425.5-7420.5)	5544.0 (2496.0-7920.0)	357	<0.001
	Mean before (SD)	**Mean after (SD)**	**Mean of difference (95% CI)**	**p value**
Dietary score	11.7 (3.7)	16.4 (3.0)	4.6 (4.1 to 5.2)	<0.001
Weight (Kg)	94.5 (20.9)	94.7 (21.5)	0.2 (-0.8 to 1.2)	0.686
BMI (kg/m^2)	36.8 (8.1)	36.9 (8.3)	0.1 (-0.3 to 0.5)	0.658
Systolic BP (mmHg)	141.6 (17.3)	141.4 (22.4)	0.2 (-3.6 to 3.9)	0.934
Diastolic BP (mmHg)	81.5 (11.6)	82.3 (13.1)	0.8 (-1.6 to 3.2)	0.516

Discussion

The study showed an improvement of 20% or more in either diet score or MET score in 78.5% of patients. Behaviour change however, did not translate into loss of weight or improvement in blood pressure. More patients changed their diet than their levels of physical activity.

Previous studies in South Africa showed only 28% of the population had high levels of physical activity.[15] In this study the median of 4950 MET minutes/week equated to a high level of physical activity.[36] According to the global recommendations on physical activity for health the WHO recommends at least 600 MET minutes/week.[39] This community is known to be physically active as they are mostly farm workers and labourers. In this study, only 8.9% of people showed an increase in physical activity and this increase was mostly seen in the patients with a low baseline MET score.

The potential to increase physical activity was therefore limited. It is also possible that unrecorded complications of obesity, such as osteoarthritis, could have limited the ability to increase activity.

Although there was a statistically significant improvement in the diet score this did not translate into a clinically significant improvement in BMI or blood pressure. This might be due to the small dose of BBCC (two 5-10 minute sessions over 6 months) and it is possible that more sessions over a shorter period could have increased the effect. The diet questionnaire recorded any change in diet and did not quantify the extent of the change, and may have over-estimated the effect. Other studies demonstrated a change in weight and blood pressure when diet and/or exercise improved.[16-18,40-42] These studies had more intense counselling (up to 5 counselling sessions) and their populations were elderly or children, compared to our average age of 54 years.

The model of BBCC in this study differed from other studies on the 5As in that the 'advise' step was replaced with an 'alert' step. This was congruent with a more guiding approach, where you alert the patient to the risks of overweight and obesity, provide information tailored to their needs and evoke their response to these risks as opposed to giving direct advice on what they should do. All the steps were formulated in a guiding style as shown in Table 1. It is possible that differences in the effect of the 5As approach could be partly attributed to these differences in the application. The researchers, however, remain convinced that a guiding style is likely to be more effective than a directive style in enabling behaviour change.[44]

This study did not formally evaluate the fidelity of counsellors to the BBCC model and did not provide further training, which might have been helpful. Lay counsellors, who were dedicated to this task and should have become proficient, performed most of the counselling. Lay counsellors are grassroots level healthcare workers trained to perform counselling and are on a par with community health workers. This study, like the study on BBCC and smoking cessation, provides further evidence that BBCC performed by lay counsellors can be succesful. This is relevant in our context where capacity to perform such counselling in primary care is very limited.

Limitations

No control group was used and therefore changes in diet and physical activity can only be associated with the BBCC intervention. However, no other confounding interventions were identified and it is unlikely that the population as a whole changed their lifestyle during this period.

The questionnaires were self-reported and it is possible that an obsequiousness bias could exist, where patients reported changes to please the health care workers. It is also possible that patient's recall and reporting did not accurately match reality, although this would apply at baseline as well as follow-up. The IPAQ is a well

validated and reliable tool internationally, although the short form is used more for surveillance than research purposes. The dietary questionnaire was originally developed to assist counselling and target behaviour change and not as a research tool.

Recommendations

This study adds further evidence to the effectiveness of this model of BBCC in our context on tobacco smoking,[33,34] alcohol use,[44] and now diet and physical activity. Further evidence is required to confirm these initial findings in larger clinical trials, particularly for diet and physical activity. Nevertheless, this evidence supports the ongoing attempts in South Africa to train primary care providers in BBCC and to incorporate this model in clinical guidelines.

Conclusion

Brief behaviour change counselling was associated with significant improvements in diet and physical activity. These changes did not lead to a significant change in weight, BMI or blood pressure. This study shows the potential of BBCC by lay counsellors in the primary care setting. The study adds to further evidence for the effectiveness of BBCC across all four key risk behaviours for NCDs. Training of primary care providers should continue and further clinical trials to assess the effect of this model of BBCC in our context are needed.

Declaration of interest

The author reports no conflict of interest. Funding for the study came from the Chronic Disease Initiative for Africa (CDIA)

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Appendices

1) International physical activity questionnaire,
2) Nutrition questionnaire

1) INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.
Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

_____ **days per week**
No vigorous physical activities ***Skip to question 3***

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

_____ **hours per day**
_____ **minutes per day**
Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think only about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

_____ **days per week**
No moderate physical activities ***Skip to question 5***

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ **hours per day**
_____ **minutes per day**
Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.
5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?
_____ **days per week**
No walking ***Skip to question 7***

6. How much time did you usually spend **walking** on one of those days?

_____ **hours per day**
_____ **minutes per day**
Don't know/Not sure
The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ **hours per day**
_____ **minutes per day**
Don't know/Not sure

This is the end of the questionnaire, thank you for participating.

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2) Nutrition Questionnaire

DO YOU USUALLY…?	YES	NO
1. Choose wholewheat or brown bread and flour, rather than white bread or flour?		
2. Have at least 3 portions of vegetables a day?		
3. Have at least 2 portions of fruits a day?		
4. Choose fat-free or low fat dairy like milk, maas or yoghurt?		

5. Eat red meat (like mutton, beef or boerewors) less than 3 times a week?		
6. Include dried or tinned beans, split peas, lentils or soya in your meals at least twice a week?		
7. Remove all visible fat from meat before you eat it?		
8. Remove the skin from chicken before you cook it?		
9. Avoid eating high-fat foods such as chips, viennas, polony or chocolate?		
10. Eat fish at least twice a week?		
11. Avoid eating takeaways or street foods like doughnuts, pies, vetkoek, samosas, fried chips, fried chicken, gatsbies or 'kotas'?		
12. Try to cook with less oil and avoid deep-frying foods?		
13. Avoid salty foods like polony, bacon, viennas, crisps, salty biscuits and high salt sauces like soya sauce or barbeque sauce?		
14. Avoid adding extra salt to your food at the table?		
15. Avoid adding high-salt ingredients like soup powders, stock cubes or salty seasonings to your food?		
16. Choose healthier snacks like fruit, vegetables, low-fat or fat-free yoghurt between your meals?		
17. Use little soft tub margarine for your bread, rather than butter or brick margarine?		
18. Avoid drinking sugary cold drinks or juices?		

19. Limit drinking alcohol to no more than 1 (women) and 2 (men) drinks per day		
20. Dish up only once and avoid having second helpings		